



UNITED STATES
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

OAK RIDGE OPERATIONS
P. O. BOX E
OAK RIDGE, TENNESSEE 37830

AREA CODE 615
TELEPHONE 483-8611

September 29, 1977

W. R. Voigt, Jr., Director, Division of Uranium Resources and
Enrichment, HQ, GTN, M.S. B-107

PRELIMINARY PROPOSAL FOR DISPOSAL OF HUNTINGTON FACILITY, HUNTINGTON,
WEST VIRGINIA

In accordance with ERDA Appendix 6101, we are submitting for your
information and retention a copy of an approved preliminary proposal
for the subject project. We are also enclosing a copy of Directive
WV-4, Modification 1, authorizing total costs of \$300,000 for your
information. This work is authorized under the KY Subprogram FY 1977
General Plant Projects.

John T. Milloway
John T. Milloway, Assistant Manager
for Construction and Engineering

EER:RRA

Enclosure:

1. Preliminary Proposal
2. Directive WV-4, Mod. 1

cc w/encl:

S. L. Hack, CPS-HQ, GTN, M.S. A-14208
M. C. Greer, OC-HQ, GTN, M.S. C-377
M. C. Greer, (Attn: ACPMA), OC-HQ, GTN, M.S. A14208
H. Hollister, OES-HQ, GTN, M.S. E-201

APPROVED FOR RELEASE
W.T. Brown/DOE 2/21/00

UNCLASSIFIED

W. J. Lemmon *WJL*

EASI 10/14/99

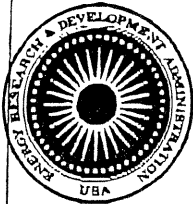
Date

B. Page

UNCLASSIFIED/NOT UCNI

CXC
Charles Crabtree ADC 4148
Review Date: 2/19/2000

PLBL
RPP



UNITED STATES
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

OAK RIDGE OPERATIONS
P. O. BOX E
OAK RIDGE, TENNESSEE 37830

DIRECTIVE NO.
WV-4
MODIFICATION NO.
1

DATE
9-29-77

AREA CODE G15
TELEPHONE 483-8611

SYMBOL: EER:RRA

DIRECTIVE AUTHORIZATION

1. TITLE

DISPOSAL OF HUNTINGTON FACILITY

PLANT

Reduction Pilot Plant

LOCATION

Huntington, W. Va.

2. TO

Director, Uranium Enrichment Operations
Division
Director, Supply Division
Director, Engineering Division

3. WORK AUTHORIZED FOR USERDA BY

John T. Milloway
(Signature)
Name John T. Milloway, Assistant Manager
Title for Construction and Engineering

4a. Previous Directive Action

Basic Date 7-14-77

4b. Request for Directive Action

Date

4c. Preliminary Proposal

W=100 Date 9-26-77

4d. Action Memorandum

Date

4e. Other References

Memorandum, 6-27-77, from ORO Supply Division to the Assistant Manager for Administration, subject, "Disposal of Huntington Facility," and "Plan for Decontamination and Disposal of Nickel Powder Plant," transmitted by memo from R. J. Hart to R. G. Romatowski, dated 10-21-76

5

☒ As Submitted

☐ With Exception as Noted on Reverse

☐ For Design Only

By Assistant Mgr. for Construction and Engineering

Date Concurrent

6a. Current Start Date

Design: July 15, 1977

Constr: January 15, 1978

6b. Current Completion Date

Design: December 31, 1977

Constr: August 1, 1978

6c.

+3+

Difference in Months

7 AUTHORIZED COST BY PARTICIPANTS

A Participant	INCO	ERDA	Demolition Subcontractor	Motor Carrier	GAT
B Type of Contract	Operating	-	Fixed-Price	Rate Agreeeme.	Operating
C Contract No.	EY-76-C-05-1092	-	(Not Yet Awarded)	(Not Yet Awd)	E-(30-2)-1
D Con Administrator	UEOD	Supply	INCO	Supply	UEOD
E. Authorized Costs					Total
(1) Engineering	\$150,000	\$5,000	\$	\$	\$155,000
(2) Constr Cost	=	=	190,000	20,000	50,000 260,000
(3) Std. Equip.	24,000	-	30,000	3,000	8,000 65,000
(4) Contingencies					
(5) Total Auth.	\$174,000	\$5,000	\$220,000	\$23,000	\$58,000 \$480,000
Less Credit from Sale of Land and Structure					- 180,000
Net Project Funds Required					\$300,000

8. SUMMARY OF FUNDING REQUIREMENTS

Classification	Item Number	Item Name	Amount
A. GPP (Y706)	KY-770140000AA2	Disposal of the Huntington Facility	\$ 300,000
B. FY 1977			
C			

D. Change This Action (if Applicable) \$ + \$250,000

E Total Authorized \$ 300,000

F Remarks All costs incurred should be transferred to ORO General Ledger.

9. This Space To Be Used as Required for Description of Facility, Statement of Authorized Work, Participant Scope, Remarks, Special Notes, Etc.

Basic Directive WV-4 authorized costs of \$40,000 for certain preliminary engineering services and advance planning related to the disposal of the Huntington Reduction Pilot Plant (RPP). A preliminary proposal covering the entire project scope has now been prepared and is concurrently approved to authorize complete engineering and planning, demolition, and transportation and burial of contaminated classified scrap. The full project funding of \$300,000 is authorized which reflects a total estimated project cost of \$480,000, less credit from the sale of land and remaining structure to International Nickel Co. (INCO) estimated at \$180,000.

INCO will perform engineering and planning and administer the contract with the demolition contractor. A commercial trucking firm under a rate agreement (Section 22 quotation) will transport the contaminated scrap. Goodyear Atomic will have responsibility for unloading and burial of the scrap.

No. W-100

PRELIMINARY PROPOSAL
FOR
DISPOSAL OF HUNTINGTON FACILITY
REDUCTION PILOT PLANT
HUNTINGTON, WEST VIRGINIA

September 26, 1977

Prepared by:
Engineering Analysis Branch
Engineering Division - ORO

I. Brief Description

The Reduction Pilot Plant (RPP), located in Huntington, West Virginia, will be dismantled with appropriate disposal of equipment, scrap and rubble, and the transfer of the remaining structure and land to the International Nickel Company (INCO). The RPP is located on approximately four acres of Government-owned land surrounded by INCO land and facilities.

The RPP process building and foundation and associated land improvements such as driveways and sidewalks, will be removed. All equipment and piping will be removed and disposed of as follows: scrap for the salvage contractor will be free of any contamination; material contaminated with uranium or nickel carbonyl will be buried for health and safety reasons; and scrap that contains classified material must also be buried. The RPP compressor building will be stripped out but the structure will remain.

The disposal operation will generate approximately 35 trailer truck loads of material. These will be taken under strict security controls to Portsmouth, Ohio, to the ERDA site for burial. The shipments will move under an approved security plan.

II. Justification of Basic Need

The Reduction Pilot Plant was built in 1951 to supply nickel powder for the uranium enrichment program. From 1963 to present, the plant has been maintained by INCO in a cold standby condition. In 1970,

the Atomic Energy Commission (AEC) decided to no longer produce powder in this plant but to hold the facility as a backup until an alternate source of production was found. An alternate source of powder was subsequently put into production and the AEC decided in late 1974 that the RPP was no longer needed as a backup and was surplus to our foreseeable needs. A proposed disposal plan was finalized and transmitted from ORO to HQ by memorandum from R. J. Hart to R. G. Romatowski, dated October 21, 1976. That plan, which forms the basis for this preliminary proposal, was approved by HQ by memorandum from G. J. Keto to R. J. Hart, dated June 10, 1977. The latter memorandum also approved the ORO recommendation to sell the land and remaining structure to INCO as part of the disposal.

III. Summary Cost Estimates

	Contract Adm., Insp., Super., Monitor., etc.	Internat. Nickel Co.	ERDA	Fixed Price Demolition Subcont.	Rate Agreem. Motor Carrier	GAT	TOTAL
	\$150,000		\$5,000				\$155,000
Demolition				\$190,000			\$190,000
Transportation					\$20,000		\$ 20,000
Scrap Burial						\$50,000	\$ 50,000
Contingency @ approx. 16% of above costs	24,000	-		30,000	3,000	8,000	\$ 65,000
	\$174,000	\$5,000		\$220,000	\$23,000	\$58,000	\$480,000
Credit from Sale of Land & Structure							- \$180,000
Net Project Funds Required							\$300,000

It is planned that this project be funded as a portion of FY 1977 Activity No. 39-KY-00-00-0 General Plant Projects. GPP funds are being used since the work involves demolition and retirement of capital assets per ERDAM 1101, Part II, Section 39.

IV. Proposed Schedule

	<u>Date Start</u>	<u>Date Complete</u>
Engineering & Planning	July 15, 1977	January 1, 1978
Demolition Contract Award	January 15, 1978	
Demolition	March 15, 1978	August 1, 1978
Scrap Burial	April 1, 1978	August 1, 1978

V. Method of Accomplishment

INCO will perform engineering and planning services in connection with the disposal. In addition INCO will handle direct administrative responsibilities for bids, evaluation and award and field inspection of the demolition contract.

A fixed price demolition subcontractor to INCO will dismantle and dispose of the building and equipment.

A commercial trucking firm under a rate agreement with ERDA will transport contaminated equipment and debris to the burial ground at Portsmouth.

Goodyear Atomic will furnish the burial ground and labor for unloading trailers and burial of contaminated and classified equipment at Portsmouth.

ERDA will provide field inspection and general oversight assistance to INCO as required.

VI. Analysis of Safety and Pollution Aspects

Much of the RPP process equipment is slightly contaminated with enriched uranium and/or nickel carbonyl and contains residual classified material which precludes normal disposal methods. ERDA-ORO health protection personnel have determined by on-site surveys that the following procedures will be followed:

a) Uranium

The amount of uranium found in most of the process piping is in the ppm range and slightly enriched and, as such, will present no health protection problems. One system, however, has larger quantities which could present an inhalation problem, and as such, will be treated accordingly.

b) Nickel Carbonyl

This will present the largest potential health protection problem. When the RPP was shut down all the nickel carbonyl was removed and the system was purged with air. During our survey trips, one piece of equipment was opened without purging and nickel carbonyl was found to be present. Therefore, all equipment previously exposed to carbonyl will be treated as if carbonyl is still present. Most likely, the carbonyl will be impregnated in the equipment walls and will be released during cutting operations.

Presently, the ACGIH recommends a TLV of .001 ppm for this substance and appropriate personnel protective measures will be taken.

c) Asbestos

The provisions of 29 CFR 1910.93a will be followed during the removal of insulating materials and no unusual problems are anticipated.

In order to provide maximum coverage in health protection and safety matters, a full time INCO representative will be present during the dismantling.

Upon completion of the dismantling operation, the land and remaining compressor building will receive a thorough health physics survey and a contamination clearance report will be prepared.